

WORLD HERITAGE NOMINATION - IUCN SUMMARY

554bis: RESERVA DEL VIZCAINO (MEXICO)

Summary prepared by WCMC/IUCN (January 1993) based on the original nomination submitted by the Government of Mexico. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION

Located in the central part of the peninsula of Lower or Baja California between the Gulf of California and the Pacific Ocean. The nomination comprises three distinct areas: Laguna Ojo de Liebre; Laguna San Ignacio and Sierra de San Francisco. Total area 554,898ha.

2. JURIDICAL DATA

The presidential decree of 1971 established a marine refuge zone for whales in Laguna Ojo de Liebre. In 1972, another decree established a series of reserves and migratory bird refuges around Laguna de San Ignacio and Ojo de Liebre. In 1979, another decree established a refuge zone for cetaceans in Laguna de San Ignacio. In 1988 El Vizcaino was declared a national biosphere reserve.

3. IDENTIFICATION

Sedimentary rock forms the landscape in the north-west and the central zone of plains and the desert, Desierto de Vizcaino, with intrusions of rhyolitic lavas, andesites and piroclasts. Important fossil beds are found between the eastern zone. The eastern topography is dominated by the main mountain chain of Baja California, with heights ranging from 1,300m to 1,996m. A series of shallow, sandy bays, inlets and saltwater lagoons is found in Laguna Ojo de Liebre and Laguna San Ignacio. The majority of soils are calcareous regosols derived from volcanic material. The hydrology is typically dendritic with intermittent rivers and streams.

Climate is dry with less than 100 mm of rainfall per year. Temperatures reach 40-45°C in summer.

The vegetation is representative of arid or hyperarid environments, a biogeographic subdivision of the Sonora desert vegetation community. There are ten plant communities. Mangrove is typical of the lagoons, and dune communities, bushes and halophytic vegetation surround them.

In the coastal zone are found approximately 20 threatened animal species, including four species of marine turtle. The bay is frequented by grey whale which breeds in Laguna Ojo de Liebre and San Ignacio. The notable birds endemic to the peninsula include peninsular yellowthroat and black-fronted hummingbird. The lagoons are important as a refuge for wintering wildfowl: 10% of the wildfowl wintering on the west coast of Mexico winter in the reserve. This includes 71,220 brent geese, 63% of Mexico's winter population.

The area has been occupied for many centuries. There are a number of prehistoric sites of importance on the peninsula, as well as petroglyphs, wall paintings and ancient ruined structures, together with evidence of the early colonization period from Europe.

4. STATE OF PRESERVATION/CONSERVATION

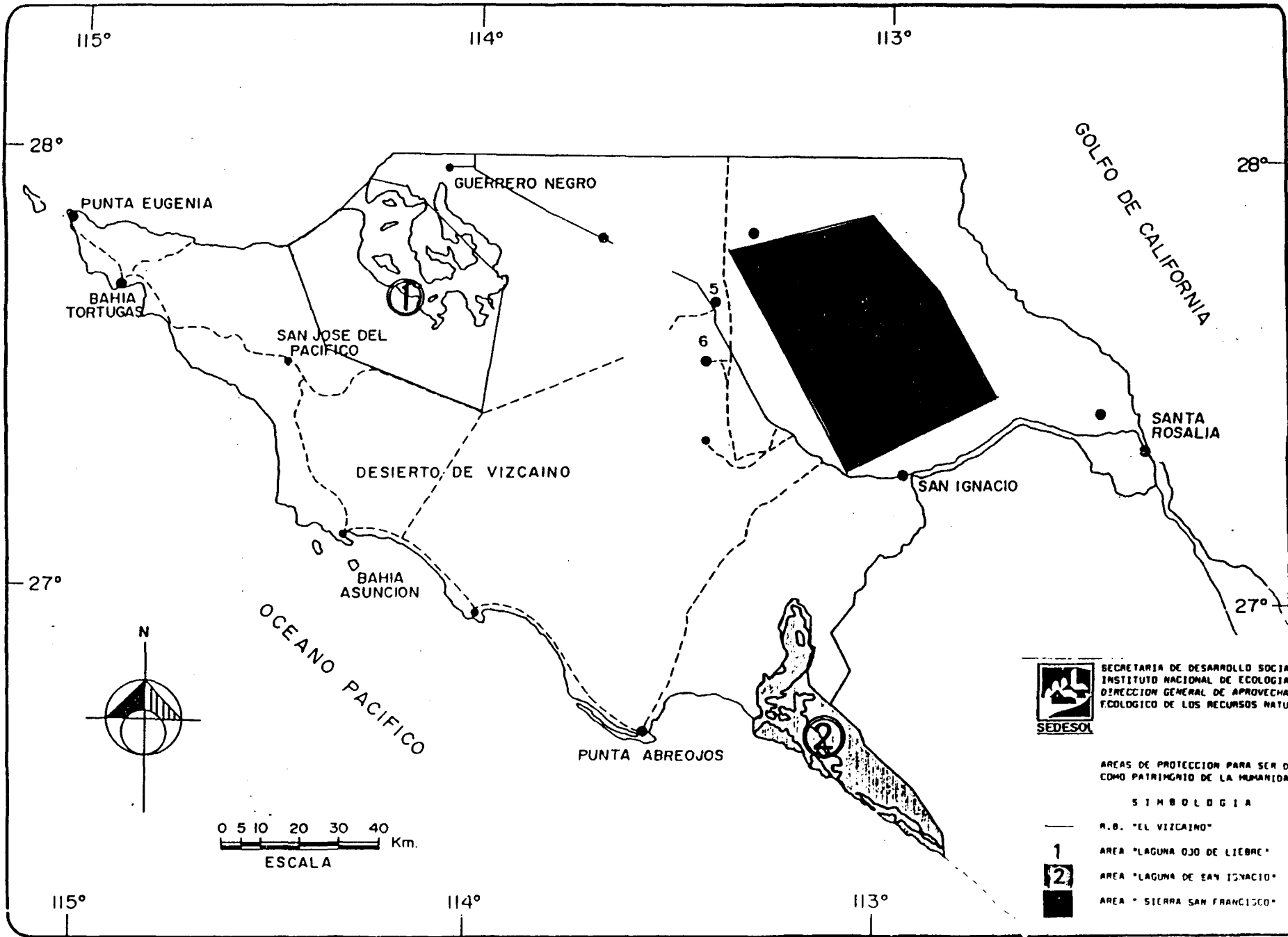
Tourism, which was formerly a threat to grey whales, is now more closely regulated. A management plan has been drawn up by the Centre for Biological Research in Baja California.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST

Reserva del Vizcaino, as presented by the Government of Mexico, provides the following justification for designation as a World Heritage property:

Natural property

- (ii) **It is an outstanding example representing significant ongoing biological evolution.** The reserve contains ecosystems of exceptional value. It also contains important fossil deposits.
- (iii) **It contains unique and superlative natural features of exceptional beauty.** The area preserves unique landscapes between the Gulf of California and the Pacific Ocean. Sierra de San Francisco contains the greatest concentration of Precolombian rock paintings in Baja California: they are unique because of their remarkable quality, their dimensions, the variety and originality of the representations of humans and animals, their color and their excellent state of preservation.
- (iv) **It contains the most important and significant habitats where threatened species of plants and animals still survive.** El Vizcaino protects a large number and variety of animal and plant species of which a considerable number are endemic and threatened. The coastal lagoons of Ojo de Liebre and San Ignacio are an exceptional reproduction and wintering site for grey whales as well as other mammals like harbor seal, California sea-lion, northern elephant-seal and blue whale (E). The site also protects four species of endangered marine turtle.



115°

114°

113°

28°

28°

27°

27°

PUNTA EUGENIA

GUERRERO NEGRO

BAHIA TORTUGAS

SAN JOSE DEL PACIFICO

DESIERTO DE VIZCAINO

BAHIA ASUNCION

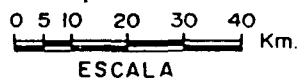
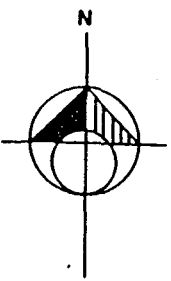
SAN IGNACIO

SANTA ROSALIA

PUNTA ABREOJOS

GOLFO DE CALIFORNIA

OCEANO PACIFICO



SECRETARIA DE DESARROLLO SOCIAL
 INSTITUTO NACIONAL DE ECOLOGIA
 DIRECCION GENERAL DE APROVECHAMIENTO
 ECOLOGICO DE LOS RECURSOS NATURALES

AREAS DE PROTECCION PARA SER DECLARADAS
 COMO PATRIMONIO DE LA HUMANIDAD

SIMBOLOGIA

- R.B. "EL VIZCAINO"
- 1 AREA "LAGUNA OJO DE LIEBRE"
- 2 AREA "LAGUNA DE SAN IGNACIO"
- AREA "SIERRA SAN FRANCISCO"

115°

114°

113°

WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

554BIS: RESERVA DEL VIZCAINO (MEXICO)

1. DOCUMENTATION

- i) IUCN/WCMC Data Sheet (17 references)
- ii) Additional Literature Consulted: IUCN, 1988, Dolphins, Porpoises and Whales. Conservation Action Plan.
- iii) Consultations: 4 external reviewers, officials of Exportadora de Sal (ES), Centro de Investigaciones Biologicas (CIB), and Secretaria de Desarrollo Urbano y Ecologia (SEDUE).
- iv) Field Visit: April, 1990. J. Thorsell, Mario Ramos.

2. COMPARISON WITH OTHER AREAS

Other important protected areas in the Sonoran Desert Biogeographical Province are all in the USA and include the National Monuments at Death Valley (840,000 ha), Joshua Tree (226,000 ha) and Organ Pipe Cactus (133,000 ha). 640 km to the north of the area is a small natural park which protects an important Baja flora (Valle de los Cirios). None of the above areas, however, have the marine and coastal aspect which support the avifauna and whales seasonally found in Vizcaino.

Other parts of the world contain protected areas with a combination of hot desert and coastal features. These include Paracas (Peru), Namib (Namibia), Asir (Saudi Arabia), Shark Bay (Australia) and Banc d'Arguin (Mauritania). Such areas are all important for birds and marine life. There are also other coastal areas where whale species are protected (e.g. Maui (USA), Golfo San José (Argentina), the Silverbank Sanctuary (Dominican Republic) and in the Seychelles).

The entire 1,300 km peninsula of Baja California is important as a wintering site for grey whales and birds and is a significant nesting area for four of the world's seven species of marine turtles. The principal areas are the two linked lagoons, Ojo de Liebre (Scammon's) and Laguna Guerrero Negro, which produce half of the world's gray whale calves born every year. The lagoons in Vizcaino thus contain the main areas for propagation of this species in the world. The lagoons in the reserve are also principal centers of dispersion for ospreys in Baja California with 223 resident breeding pairs.

The third unit in the revised nomination is the inland site of Sierra de San Francisco. This is a separate cultural site not linked to the two lagoons and is being separately evaluated by ICOMOS.

3. INTEGRITY

Although Vizcaino was declared a national biosphere reserve in 1988, protection of the two marine refuges for whales within the reserve were made in various decrees between 1971 and 1980. Before that time there were a number of unfortunate incidences involving collisions with and disturbances by freighters from the salt works in Guerrero Negro. The setting of nets by fishermen at the entrance of the lagoons was also a problem prior to 1985. Both these issues have now been

resolved in collaboration with the State Secretariat for the Navy, the Fisheries Department and the private salt company.

Tourism in the two lagoons has also become a management issue in recent years. The number of whale-watchers has increased from 1,000 in 1980 to 30,000 today. With up to 800 whales in Scammon's lagoon in one day there are obviously potentials for impact from uncontrolled use. One field warden is available for supervision but no visitor facilities are provided. Other impacts from tourists at rock art sites have been experienced but the National Institute for Anthropology and History have taken measures to limit these.

The major current constraint on the integrity of the reserve is lack of on-site management. There are only three staff (including one field assistant) and a minimal operational budget. There are no education facilities, entrance signs or patrols. The proposed management program outlines a series of activities but the financial resources to implement these are not assured.

Other concerns with integrity are:

- land ownership. 43% of the land and water in the total nominated area is under private or communal ownership (e.g. "ejidos"). This means that management is dependent on voluntary compliance;
- the townsite of Guerrero Negro and the salt works are located on the margins of the site. Though both the local people and the industry are supportive of conservation of the lagoons, close liaison and monitoring by the reserve management will be required.

4. ADDITIONAL COMMENTS

This revised nomination has taken the concerns of the previous IUCN evaluation in 1990 into consideration and focussed on the 3 main features within a 2.5 million ha biosphere reserve. Two of these features are the natural sites of the coast while the third is the cultural site 120 km inland from the coast. There are no functional linkages between the lagoons and the rock art sites and no universally significant natural values at the inland site. The Bureau may wish to consider them as two separate nominations.

5. EVALUATION

Within the total area of the Vizcaino Biosphere Reserve, World Heritage values are primarily concentrated in the two nominated coastal lagoons where the whale breeding and parturition concentrations occur. Along with the birdlife on the shorelines and enclosed islands, the lagoons are two areas of international importance that satisfy natural criterion (iv).

In terms of integrity, management actions need to be taken on the following aspects if natural values are to be maintained:

- infrastructure within the core areas of the reserve need to be improved to better support management activities (research, patrols);
- agencies responsible for management need to be provided with basic equipment (vehicles, communications, offices) and trained staff;
- education and extension services for both visitors and local residents are needed to better promote the features of the area and the need for their protection; and

- the various procedures for integrated administration of the area as outlined in the proposed management program need to commence.

Finally, it should be noted in relation to the condition of integrity relating to migratory species, that the gray whales which spend 3 months of the year in Vizcaino migrate 8,000 km to the Arctic feeding grounds every summer. Aboriginal populations in Siberia, Alaska and Canada still take a limited harvest. Vulnerability of the whales in other portions of their range is addressed by multilateral agreements such as those of the International Whaling Commission.

6. RECOMMENDATIONS

Two of the three separate units of the nomination meet natural criterion (iv) and thus merit inscription. The third unit is a cultural site being evaluated by ICOMOS. If the natural site is to be listed separately a new more descriptive name for the property (Baja California Whale Lagoons (??)) should be requested from the authorities from Mexico. No response from Mexico on the Bureau requests has been received as of the date of submission of this evaluation (15 October).

